

**WACO DIVISION**

)

)

)

3

)

)

)

)

)

)

,

**OF DR. DEAN NEIKIRK**

TABLE OF CONTENTS

I.	THE IMPROPER TECHNICAL TESTIMONY TO EXCLUDE .....	1
II.	STANDARDS OF ADMISSIBILITY .....	1
A.	Dr. Neikirk’s opinions based on “[REDACTED]” are unreliable as a matter of law. ....	3
B.	Dr. Neikirk applies an incorrect claims construction of JFET region. ....	8
C.	Dr. Neikirk’s cost estimates are unreliable and disclaimed under oath. ....	12
D.	Dr. Neikirk applies an incorrect construction to the term “source electrode” using extrinsic evidence that no court would consider in construing the ’633 Patent. ....	14
III.	CONCLUSION .....	15

# TABLE OF AUTHORITIES

## **CASES:**

<i>Allen v. Pa. Eng’g Corp.</i> , 102 F.3d 194 (5th Cir. 1996) .....	3
<i>Bianco v. Globus Med., Inc.</i> , 30 F. Supp. 3d 565 (E.D. Tex. 2014) .....	5, 11
<i>Castro v. Kory</i> , 2023 WL 2566088 (W.D. Tex. Mar. 17, 2023) .....	3
<i>Chapman v. Maytag Corp.</i> , 297 F.3d 682 (7th Cir. 2002) .....	3
<i>CIT Grp./Bus. Credit, Inc. v. Graco Fishing &amp; Rental Tools, Inc.</i> , 815 F.Supp.2d 673 (S.D.N.Y. 2011) .....	3
<i>Daubert v. Merrell Dow Pharmaceuticals, Inc.</i> , 509 U.S. 579 (1993) .....	2, 3
<i>Grasshopper House, LLC v. Clean &amp; Sober Media LLC</i> , 2019 WL 12074086 (C.D. Cal. July 1, 2019) .....	3
<i>Guangzhou Yucheng Trading Co., Ltd. v. Dbest Products, Inc.</i> , 2022 WL 17886016 (C.D. Cal. 2022) .....	9, 14
<i>Kumho Tire Co. v. Carmichael</i> , 526 U.S. 137 (1999) .....	2
<i>Liquid Dynamics Corp. v. Vaughan Co.</i> , 449 F.3d 1209 (Fed. Cir. 2006) .....	9, 14
<i>Pipitone v. Biomatrix, Inc.</i> , 288 F.3d 239 (5th Cir. 2002) .....	2
<i>Sec. &amp; Exch. Comm’n v. CapWealth Advisors, LLC</i> , 2022 WL 4225846 (M.D. Tenn. Aug. 3, 2022) .....	3
<i>St. Michael’s Emergency Ctr., LLC v. Aetna Health Mgmt., LLC.</i> , 2011 WL 12896736 (S.D. Tex. Aug. 22, 2011) .....	5, 11
<i>Summit 6, LLC v. Samsung Elecs. Co., Ltd.</i> , 802 F.3d 1283 (Fed. Cir. 2015) .....	2, 6, 10, 12

*Viterbo v. Dow Chem. Co.*,  
646 F. Supp. 1420 (E.D. Tex. 1986)..... 6, 11

*Wasica Fin. GmbH v. Schrader Int'l, Inc.*,  
432 F. Supp. 3d 448 (D. Del. 2020)..... 12

**RULES:**

Fed. R. Evid. 401 ..... 1

Fed. R. Evid. 403 ..... 1

Fed. R. Evid. 702 ..... 1

Fed. R. Evid. 803 ..... *passim*

## I. THE IMPROPER TECHNICAL TESTIMONY TO EXCLUDE

The Trustees of Purdue University (“Purdue”) filed this suit against STMicroelectronics International N.V. and STMicroelectronics, Inc. (collectively “ST”) for ST’s past and ongoing willful infringement of U.S. Patent No. 7,498,633 (“’633 Patent”) (D.I. 1). On July 14, 2023, ST provided to Purdue the Expert Report of Dr. Dean Neikirk (the “Neikirk Report”) containing the following technical disclosures and opinions that are inadmissible under *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993) and Fed. R. Evid. 401, 403, 702 and 802:

A. [REDACTED]

[REDACTED]  
[REDACTED].<sup>1</sup>

B. [REDACTED]

[REDACTED]  
[REDACTED].<sup>2</sup>

C. [REDACTED]

[REDACTED].<sup>3</sup>

D. [REDACTED]

[REDACTED]  
[REDACTED].<sup>4</sup>

## II. STANDARDS OF ADMISSIBILITY

Under Federal Rule of Evidence 702, a witness qualified as an expert “by knowledge, skill, experience, training, or education” may testify regarding “scientific, technical or other

---

<sup>1</sup> Ex. 1 (Expert Report of Dean Neikirk, Ph.D. at ¶¶ 290-305).

<sup>2</sup> *Id.* at ¶¶ 298-305.

<sup>3</sup> *Id.* at ¶¶ 436-438.

<sup>4</sup> *Id.* at ¶¶ 290-305.

specialized knowledge” if such knowledge “will assist the trier of fact to understand the evidence or to determine a fact in issue.” Fed. R. Evid. 702. Rule 702’s requirements for admissibility are not limited to opinion testimony but applies to any testimony by an expert based upon scientific, technical or other specialized knowledge beyond the experience of a lay juror. *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 143 (1999) (extending *Daubert*’s general holding to all expert testimony based on “scientific,” “technical” and “other specialized” knowledge.”).<sup>5</sup>

When technical testimony is offered in any form, the trial judge must act as a gatekeeper and admit only testimony which is relevant and reliable. *Daubert* at 589. To ensure testimony is reliable, courts must “make certain that an expert, whether basing testimony upon professional studies or personal experience, employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field.” *Kumho Tire Co.*, 526 U.S. at 152. The party offering the expert’s testimony must prove by a preponderance of the evidence that: (1) the expert is qualified, (2) the testimony is relevant to an issue in the case and (3) the testimony rests upon a reliable foundation. *Daubert*, 509 U.S. at 590-91.

“[A] district court may exclude evidence that is based upon unreliable principles or methods, legally insufficient facts and data, or where the reasoning or methodology is not sufficiently tied to the facts of the case.” *Summit 6, LLC v. Samsung Elecs. Co., Ltd.*, 802 F.3d 1283, 1295 (Fed. Cir. 2015) (citing *Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137, 150 (1999)). “[I]f the foundational data underlying opinion testimony are unreliable, an expert will not be permitted to base an opinion on that data because any opinion from that data is likewise unreliable.” *Castro v. Kory*, 2023 WL 2566088 at \*6 (W.D. Tex. Mar. 17, 2023) (citing *Allen v. Pa. Eng’g Corp.*, 102 F.3d 194, 199 (5th Cir. 1996)). “Personal observation is not a substitute for

---

<sup>5</sup> See also *Pipitone v. Biomatrix, Inc.*, 288 F.3d 239, 244 (5th Cir. 2002) (“This gate-keeping obligation applies to all types of expert testimony, not just scientific testimony.”).

scientific methodology and is insufficient to satisfy *Daubert's* most significant guidepost.”

*Chapman v. Maytag Corp.*, 297 F.3d 682, 688 (7th Cir. 2002).

**A. Dr. Neikirk’s opinions based on [REDACTED] are unreliable as a matter of law.**

Courts have routinely held that “[a]ssumptions based on conclusory statements of the expert’s client, rather than on the expert’s independent evaluation are not reasonable.”

*Grasshopper House, LLC v. Clean & Sober Media LLC*, 2019 WL 12074086 at \*3 (C.D. Cal. July 1, 2019); *see also Sec. & Exch. Comm’n v. CapWealth Advisors, LLC*, 2022 WL 4225846 at \*4 (M.D. Tenn. Aug. 3, 2022) (“Neither shall an expert offer his client’s opinion as his own or base his testimony on conclusory statements without independent evaluation of the facts.”); *CIT Grp./Bus. Credit, Inc. v. Graco Fishing & Rental Tools, Inc.*, 815 F.Supp.2d 673, 677 (S.D.N.Y. 2011) (rejecting expert testimony based on “the conclusory statements of [the party’s management] and not on his independent evaluation of the facts”).

In his report, Dr. Neikirk states that [REDACTED]

[REDACTED].<sup>6</sup> Dr. Neikirk further states that [REDACTED]

[REDACTED]

[REDACTED].<sup>8</sup> This opinion that the

[REDACTED]

[REDACTED] suffers several fatal flaws as to admissibility.

1. [REDACTED]  
[REDACTED].

---

<sup>6</sup> *Id.* at ¶ 290.

<sup>7</sup> *Id.* at ¶¶ 291, 296.

<sup>8</sup> *Id.* at ¶¶ 298-305.





[REDACTED]<sup>14</sup> [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

[REDACTED] s. *Siqueiros v. General Motors, LLC*, 2022 WL 3974752 \*7-8 (N.D. Cal. August 31, 2022); Fed. R. Evid. 1006.<sup>15</sup>

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

---

<sup>14</sup> See Ex. 6.

<sup>15</sup> See also *Miller*, 771 F.2d at 1238 (summary inadmissible because the proponent failed to provide the underlying data); *Amarel v. Connell*, 102 F.3d 1494, 1517 (9th Cir. 1996), as amended (Jan. 15, 1997) (“The district court’s explanations unfortunately ignore the requirement—embodied in the mandatory language of Federal Rule of Evidence 1006 and explicitly required by our *Paddack* decision, that a party must make available to the opposing party the materials that have gone into preparing the summary exhibit.”). [REDACTED]

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

<sup>16</sup> A proponent of a summary must establish as a foundation that the underlying materials upon which the summary is based are admissible in evidence. *Paddack v. Dave Christensen, Inc.*, 745 F.2d 1254, 1259 (9th Cir. 1984). [REDACTED]

[REDACTED]. See *St. Michael's Emergency Ctr., LLC v. Aetna Health Mgmt., LLC*, 2011 WL 12896736 at \*7 (S.D. Tex. Aug. 22, 2011) (excluding document prepared for the purpose of litigation from business document exception of hearsay rule). “[Expert] testimony is not a vehicle by which evidence that is otherwise inadmissible may be introduced.” *Bianco v. Globus Med., Inc.*, 30 F. Supp. 3d 565, 570 (E.D. Tex. 2014).

*R.F.M.A.S. v. So*, 271 F.R.D. 13, 23 (S.D.N.Y. 2010) (“To impose an adverse inference instruction for discovery abuse involving the spoliation of evidence or failure to timely produce evidence, the court must also find that the evidence destroyed or withheld is “relevant” to another party's claim or defense”). [REDACTED] are inadmissible under Rule 401 (no foundation), 403 (prejudice, confusion), 802 (hearsay) and 1006 (failing to qualify as summaries of admissible information).

Dr. Neikirk explicitly admitted in his deposition [REDACTED]

REDACTED

<sup>17</sup> Ex. 7 (Deposition of Dr. Dean Neikirk at 135:1-137:21).

19

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

<sup>21</sup> An optical microscope has a **lower** image resolution than the scanning electron microscope and scanning capacitance microscopy tools used by Purdue's experts. *See* <https://labproinc.com/blogs/microscopes-lighting-and-optical-inspection/the-difference-between-optical-microscope-and-electron-microscope#:~:text=The%20Scanning%20Electron%20Microscopes%20tend,view%20of%20the%20solid%20sample.&text=In%20optical%20microscopy%2C%20the%20resolution,to%20be%20400%2D700%20nanometers; see also https://afm.oxinst.com/outreach/scanning-capacitance-microscopy-scm-application-note>. In his report, Dr. Neikirk REDACTED

3. [REDACTED]  
[REDACTED]

Finally, the failures to lay a proper predicate or disclose reliable principles and methods are all beside the fact that, by [REDACTED]  
[REDACTED]

[REDACTED].<sup>22</sup> Dr. Neikirk could not cite a single source or reference where [REDACTED]  
[REDACTED]

[REDACTED].<sup>23</sup>

Dr. Neikirk's opinion that [REDACTED] REDACTED

[REDACTED]. Additionally, the fact [REDACTED]  
[REDACTED]  
[REDACTED]

**B. Dr. Neikirk applies an incorrect claims construction of JFET region.**

Dr. Neikirk applies a definition of "JFET region" that is clearly erroneous. The parties *agreed* during the *Markman* process that the "JFET region defined between" the source regions was as ST described it in its opening claim construction brief: "the region between the wells 26 and 28, where the JFET region 30 and the CSL 20 have similar doping concentrations[.]"<sup>24</sup>

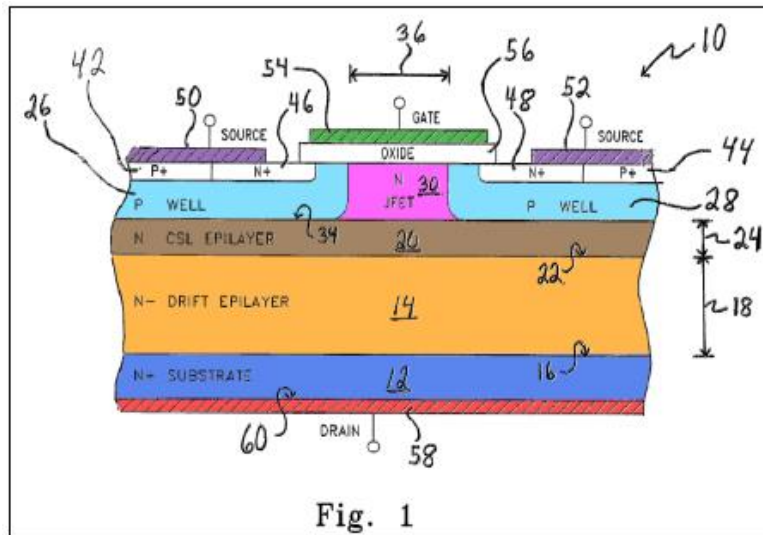
[REDACTED] REDACTED .  
An optical microscope uses light and can never show the detail of an SCM or SEM image.

<sup>22</sup> *Id.* at 138:24-140:8.

<sup>23</sup> *See id.* at 221:4-222:14.

<sup>24</sup> Dkt. 66 at 12.

Believing the parties agreed on a plain and ordinary meaning, Purdue did not seek a construction from the Court.<sup>25</sup> Now, Dr. Neikirk is offering opinions on [REDACTED] in the ST Accused Products that is fundamentally different from the definition ST agreed to during the *Markman* process.



ST Claim Construction Brief Annotated Fig. 1<sup>26</sup>

REDACTED

<sup>25</sup> See generally Dkt. 70.

<sup>26</sup> Dkt. 66 at 12.

<sup>27</sup> See Ex. 7 (Deposition of Dr. Dean Neikirk at 149:2-151:2).

The specification of the '633 Patent makes clear that the JFET region is “formed between the wells 26, 28.”<sup>28</sup> [REDACTED]

[REDACTED]

[REDACTED]<sup>29</sup>

[REDACTED]

[REDACTED]

[REDACTED]<sup>30</sup>

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

---

<sup>28</sup> Ex. 8 ('633 Patent at 5:25-26).

<sup>29</sup> Ex. 1 (Expert Report of Dean Neikirk, Ph.D. at ¶¶ 298-305).

<sup>30</sup> Ex. 8 ('633 Patent at 5:25-26).

REDACTED  
REDACTED  
REDACTED  
REDACTED  
REDACTED  
REDACTED  
REDACTED  
REDACTED  
REDACTED<sup>31</sup>

“‘[C]onclusory, unsupported assertions by experts as to the definition of a claim term are not useful,’ and any expert ‘that is clearly at odds with the claim construction mandated by the claims themselves, the written description, and the prosecution history,’ should be ignored.”

*Guangzhou Yucheng Trading Co., Ltd. v. Dbest Products, Inc.*, 2022 WL 17886016, \*5–\*7 (C.D. Cal. 2022) (citing *Liquid Dynamics Corp. v. Vaughan Co.*, 449 F.3d 1209, 1224 n.2 (Fed. Cir. 2006)). Dr. Neikirk provides no basis whatsoever that the phrase “REDACTED

REDACTED”  
REDACTED. Dr. Neikirk’s application of the phrase is entirely arbitrary and is inconsistent with the judicial admissions made by ST during the claims construction process.

It cannot be said that Dr. Neikirk’s testimony regarding REDACTED  
REDACTED.

Further, it cannot be said that Dr. Neikirk has reliably applied reliable principles and methods to the facts of the case. *Summit 6*, 802 F.3d 1295 (Fed. Cir. 2015); Fed. R. Evid. 702(c)-(d). Dr. Neikirk admitted that REDACTED

REDACTED.<sup>32</sup> Dr. Neikirk’s construction of JFET is also inconsistent with REDACTED

<sup>31</sup> Ex. 7 (Deposition of Dr. Dean Neikirk at 155:25-158:2).

<sup>32</sup> *Id.* at 221:14-222:14.

[REDACTED].<sup>33</sup> For these reasons, Dr. Neikirk's opinions regarding the JFET region encompassing portions of the P-wells in the Accused Products should be excluded under Fed. R. Evid. 702 and 803.

**C. Dr. Neikirk's cost estimates are unreliable and disclaimed under oath.**

In his Report, Dr. Neikirk opines on [REDACTED]

[REDACTED].<sup>34</sup> However, not only did Dr. Neikirk testify that [REDACTED]

[REDACTED].<sup>36</sup> Dr. Neikirk testified that [REDACTED]

[REDACTED]<sup>37</sup>

[REDACTED]

[REDACTED]<sup>38</sup>

<sup>33</sup> See Ex. 2 (Deposition of Mario Saggio at 69:13-71:20).

<sup>34</sup> Ex. 1 (Expert Report of Dean Neikirk, Ph.D. at ¶¶ 436-438).

<sup>35</sup> Ex. 7 (Deposition of Dr. Dean Neikirk at 200:2-17).

<sup>36</sup> *Id.* at 201:20-204:7; Ex. 1 (Expert Report of Dean Neikirk, Ph.D. at ¶¶ 436-438).

<sup>37</sup> Ex. 7 (Deposition of Dr. Dean Neikirk at 201:20-204:7).

<sup>38</sup> *Id.* at 201:20-202:11.



Thus, it is impossible to tell whether [REDACTED]

[REDACTED]. *See St. Michael's Emergency Ctr., LLC v. Aetna Health Mgmt., LLC*, 2011 WL 12896736 at \*7 (S.D. Tex. Aug. 22, 2011) (excluding document prepared for the purpose of litigation from business document exception of hearsay rule). [REDACTED]

[REDACTED] “[Expert] testimony is not a vehicle by which evidence that is otherwise inadmissible may be introduced.” *Bianco v. Globus Med., Inc.*, 30 F. Supp. 3d 565, 570 (E.D. Tex. 2014).

There is no way, based upon Dr. Neikirk’s testimony, to ascertain the methodology [REDACTED]

[REDACTED].

Furthermore, Dr. Neikirk testified that [REDACTED]

[REDACTED].<sup>39</sup> Therefore, it cannot be said that Dr. Neikirk’s testimony regarding [REDACTED] is the product of reliable principles and methods, and further cannot be said that Dr. Neikirk has reliably applied principles and methods to the facts of the case. *Summit 6*, 802 F.3d 1295 (Fed. Cir. 2015); Fed. R. Evid. 702(c)-(d). In his deposition, Dr. Neikirk effectively [REDACTED]

[REDACTED]

[REDACTED].<sup>40</sup>

For these reasons, Dr. Neikirk’s opinion that [REDACTED]

[REDACTED]

[REDACTED] should be excluded under Fed. R. Evid. 702 and 803.<sup>41</sup>

---

<sup>39</sup> *Id.* at 108:16-109:21.

<sup>40</sup> *Id.* at 203:10-204:2.

<sup>41</sup> This would not be the first time Dr. Neikirk’s testimony has been stricken for going beyond the bounds of his scientific experience to opine on economic matters. *See Wasica Fin. GmbH v.*

**D. Dr. Neikirk applies an incorrect construction to the term “source electrode” using extrinsic evidence that no court would consider in construing the ’633 Patent.**

In his Report, Dr. Neikirk provides an opinion on REDACTED

REDACTED [.]”<sup>42</sup> Dr. Neikirk

derives this opinion in substantial part from REDACTED

REDACTED Dr. Neikirk testified that REDACTED

REDACTED.<sup>44</sup> Lacking any reliable information upon which to base his opinions, Dr. Neikirk ignores the specification and instead

literally REDACTED

REDACTED. No court would rely upon such extrinsic evidence in construing the term, and Dr. Neikirk admitted that REDACTED

REDACTED.<sup>46</sup>

Dr. Neikirk’s opinion regarding REDACTED

REDACTED His argument contradicts the language of the patent specification itself that the first and second source electrodes can be coupled to form a unitary electrode. For example, in its description of Figure 1, the specification states that the “semiconductor device 10 also includes source regions 46, 48 defined in the ‘P’ wells 26, 28, respectively. ... The

---

*Schrader Int’l, Inc.*, 432 F. Supp. 3d 448, 460 (D. Del. 2020) (excluding opinion of Dr. Neikirk regarding REDACTED).

<sup>42</sup> Ex. 1 (Expert Report of Dean Neikirk, Ph.D. at ¶ 310).

<sup>43</sup> *Id.* at ¶¶ 311, 352-363.

<sup>44</sup> See Ex. 7 (Deposition of Dr. Dean Neikirk at 108:16-110:3).

<sup>45</sup> The REDACTED are hearsay, out of court statements, and offered for the truth of the matter asserted. They are not statements of Purdue and do not qualify as party admissions.

<sup>46</sup> Ex. 7 (Deposition of Dr. Dean Neikirk at 108:16-110:3).

semiconductor 10 also includes base electrode regions 42, 44. ... A source metallic electrode 50, 52, is formed over the source regions 46, 48, respectively. In some embodiments, the source electrodes 50, 52, are coupled to form a unitary source electrode.”<sup>47</sup> The specification also teaches that the semiconductor device “may be electrically coupled with other electrical devices, sources, or the like via the electrodes 50, 52, 54, 58.”<sup>48</sup> [REDACTED]

[REDACTED]

[REDACTED] The structures Purdue is pointing to in the Accused Products as the first and second source electrodes are [REDACTED].<sup>49</sup> The structure that Dr. Neikirk points to [REDACTED]

[REDACTED].<sup>50</sup> [REDACTED]

[REDACTED]. The ’633 Patent expressly contemplates such a structure.

As stated above, conclusory, unsupported statements by an expert as to the meaning of a claim term that are clearly at odds with the claims and written description of the ’633 Patent should be ignored. *See Guangzhou Yucheng Trading Co.*, 2022 WL 17886016, \*5–\*7 (C.D. Cal. 2022) (citing *Liquid Dynamics Corp. v. Vaughan Co.*, 449 F.3d 1209, 1224 n.2 (Fed. Cir. 2006)).

## II. CONCLUSION

For the foregoing reasons, Plaintiff respectfully requests that the Court grant Plaintiff’s Motion to Exclude the Testimony of Dr. Neikirk regarding his opinions as stated in paragraphs 269-283, 290-305, 309-312, 352-363, and 436-438 of his Report.

---

<sup>47</sup> Ex. 8 (’633 Patent at 6:63-7:7).

<sup>48</sup> *Id.* at 7:19-21.

<sup>49</sup> Ex. 9 (Supplemental Expert Report of Dr. Sarit Dhar at ¶¶ 5-8).

<sup>50</sup> Ex. 1 (Expert Report of Dean Neikirk, Ph.D. at ¶¶ 264-283).

Respectfully submitted,

/s/ Michael W. Shore

Michael W. Shore (SBN 18294915)  
Chijioke E. Offor (SBN 24065840)  
Halima Shukri Ndai (SBN 24105486)  
THE SHORE FIRM LLP  
901 Main Street, Suite 3300  
Dallas, Texas 75202  
Tel: (214) 593-9110  
Fax: (214) 593-9111  
mshore@shorefirm.com  
coffor@shorefirm.com  
hndai@shorefirm.com

Brian D. Melton (SBN 24010620)  
John P. Lahad (SBN 24068095)  
Abbey McNaughton (SBN 24116751)  
SUSMAN GODFREY L.L.P.  
1000 Louisiana Street, Suite 5100  
Houston, Texas 77002-5096  
Tel: (713) 651-9366  
Fax: (713) 654-6666  
bmelton@susmangodfrey.com  
jlahad@susmangodfrey.com  
[amcnaughton@susmangodfrey.com](mailto:amcnaughton@susmangodfrey.com)

*COUNSEL FOR PLAINTIFF  
THE TRUSTEES OF PURDUE  
UNIVERSITY*

### **CERTIFICATE OF SERVICE**

I hereby certify that on August 8, 2023, the foregoing was served via electronic mail upon all counsel of record for the parties.

/s/ Michael W. Shore